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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,112	10/14/2003	Erno Temesi	21334-1267	4430

29450 7590 12/23/2004

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EXAMINER	
VU, BAO Q	

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/685,112	TEMESI ET AL.	
	Examiner	Art Unit	
	Bao Q. Vu	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10-14-03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8-10, 13, 19-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Matsumoto et al. (USP 6,285,170). Matsumoto discloses a bridge rectifier (4), feedback windings (8c), a rectifier switch (52) and a current limiting circuit (6), in parallel with the rectifier switch (52).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2, 14, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (USP 6,285,170) in view of Gordon (USP 5,815,386). Matsumoto discloses the claimed device except for having the feedback inductor inductively coupled to the input inductor of the boost converter. Gordon discloses that it is known in the art to provide the feedback inductor inductively coupled to the input inductor of the boost converter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the switching power supply circuit of Matsumoto with the feedback inductor inductively coupled to the input inductor of the boost converter of Gordon, in order to make for a more efficient circuit.

7. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (USP 6,285,170) in view of Gordon (USP 5,815,386). Matsumoto and Gordon disclose the claimed invention except for the number of windings and the switching signals being controlled by ratio of the number of windings and the windings and the switching signal is controlled by polarization of the windings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the number of windings and the switching signals being controlled by ratio of the number of windings and the windings and the switching signal is controlled by

polarization of the windings since the examiner takes Official Notice of the equivalence of the polarization of windings and the control of the switching based on the ratio of the number of windings and for their use in the transformer switching art and the selection of any of these known equivalents to effect the transfer of current from the primary side to the secondary side of the transformer would be within the level of ordinary skill in the art.

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (USP 6,285,170) in view of Min (USP 5,202,819). Matsumoto discloses the claimed device except for having at least two rectifying elements connected to at least one of the input lines and two controllable rectifying elements that are switched. Min discloses that it is known in the art to provide at least two rectifying elements connected to at least one of the input lines and two controllable rectifying elements that are switched. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide at least two rectifying elements connected to at least one of the input lines and two controllable rectifying elements that are switched of Min with the switching power supply circuit of Matsumoto, in order to provide a controlled input type rectifier circuit having a circuit for preventing or minimizing an inrush current generated by initiation of rectification.

9. Claims 3, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (USP 6,285,170) in view of Gordon (USP 5,815,386) and further in view of Min (USP 5,202,819). Matsumoto and Gordon discloses the claimed device except for having at least two rectifying elements connected to at least one of the input

lines and two controllable rectifying elements that are switched. Min discloses that it is known in the art to provide at least two rectifying elements connected to at least one of the input lines and two controllable rectifying elements that are switched. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide at least two rectifying elements connected to at least one of the input lines and two controllable rectifying elements that are switched of Min with the switching power supply circuit with inductive coupling of the primary and secondary windings use in a boost circuit of Matsumoto and Gordon, in order to provide a controlled input type rectifier circuit having a circuit for preventing or minimizing an inrush current generated by initiation of rectification.

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (USP 6,285,170) in view of Gordon (USP 5,815,386) and further in view of Min (USP 5,202,819). Matsumoto, Gordon and Min disclose the claimed invention except for the number of windings and the switching signals being controlled by ratio of the number of windings and the windings and the switching signal is controlled by polarization of the windings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the number of windings and the switching signals being controlled by ratio of the number of windings and the windings and the switching signal is controlled by polarization of the windings since the examiner takes Official Notice of the equivalence of the polarization of windings and the control of the switching based on the ratio of the number of windings and for their use in the transformer switching art and the selection of any of these

known equivalents to effect the transfer of current from the primary side to the secondary side of the transformer would be within the level of ordinary skill in the art.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Vu whose telephone number is (571) 272-2088. The examiner can normally be reached on Monday-Fridays, 8:00AM- 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Q. Vu
Primary Examiner
Art Unit 2838

December 20, 2004